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# **Resources Planning Act** $\Delta \circ \Delta$

**SUMMARY FOR  
Alaska & Pacific  
Northwest Forest &  
Range Experiment  
Station**  $\Delta / \Delta$

$\#C$  U.S. DEPARTMENT OF AGRICULTURE

FOREST SERVICE  $\circ$

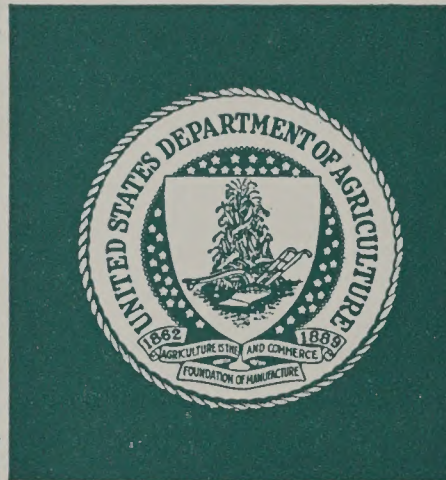




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## FOREWORD

This booklet has been prepared with the hopes that you, our public, will better understand what the Forest and Rangeland Renewable Resources Act (popularly known as RPA) is all about. We want to emphasize its importance and significance in the long-term of our Nation's national resources and most important we want to emphasize the role you can play in determining how those resources will be managed.

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## I. Introduction

In 1974, Congress enacted legislation to provide long-term planning for the Nation's renewable resources. The Forest and Rangeland Renewable Resources Planning Act directs the Secretary of Agriculture to periodically assess the national situation of the forest and rangeland resources, and to submit, at regular intervals, recommendations for long-range Forest Service programs essential to meet future needs for those resources. The program recommendations are to cover all the activities of the Forest Service. This document summarizes the response of the Forest Service to that legislative direction.

The Forest Service in the U.S. Department of Agriculture is responsible for Federal leadership in forestry, including the management protection and utilization of the natural resources on forests and related rangelands--one-third of Nation's land. It carries out this role through several main activities: (1) protection and management of resources on 187 million acres of National Forest lands; (2) cooperation with State and local governments, forest industries and private landowners to help protect and manage 631 million acres of non-Federal forest and associated range and watershed land; (3) research in various aspects of forestry conducted at 80 different laboratories and other scientific facilities throughout the country; and (4) participation with other agencies in manpower, youth and community assistance programs seeking to improve living conditions in rural areas.

The initial RPA assessment was completed in 1975. This assessment provided an inventory of resources and described the overall situation--problems and opportunities, potential supply, future uses and the likely demand--and it also offered alternatives to management policies including an estimated cost which would be incurred at the various management levels. A Recommended Program, which was the management policy alternative best felt to meet the projected needs of the American public was developed based on that document. This initial effort is fully explained in three documents: THE NATION'S RENEWABLE RESOURCES--AN ASSESSMENT: A RECOMMENDED RENEWABLE RESOURCES PROGRAM; and, A RPA SUMMARY, which highlights the important points of the first two.

The Recommended Program has become the basis for the long-range planning and budgeting process for the Forest Service. The Assessment indicated that the forests and rangelands had the potential to produce much more of its products and services. The Program stresses development and strengthening of management programs to insure that these products and services will meet the projected demand.

Congress passed the National Forest Management Act in 1976. A major part of this act was devoted to amending and strengthening the RPA. These amendments include: requirements for recommendations in the RPA Program which evaluate major Forest Service management objectives; explain opportunities for all forest and rangeland owners to improve their land; recognize the need to improve and protect the quality of the air, soil and



water; state national goals relating to all renewable resources; require an evaluation of the impacts of log exports and imports on the domestic timber supply and price; and requires integrated land management plans prepared with public participation and an interdisciplinary process for all units of the National Forest System. The Act also requires that RPA documents show the status of major research activities and a report on the fiber potential of all forest lands.

The Recommended Program developed from the 1975 Assessment provided the following management direction for the Forest Service: (1) emphasize dispersed recreation opportunities; (2) allocate a moderate amount of National Forest lands to wilderness; (3) use the most cost effective methods in timber and range management, and (4) strengthen and enhance management programs relating to fish and wildlife, land and water stewardship, and human and community development.

Goals were established under six resource systems; Recreation and Wilderness, Wildlife and Fish Habitat, Range, Timber, Land and Water, and Human and Community Development. These goals were based on public comment, professional judgment, environmental impacts and economics. National targets, expressed in terms of outputs and the cost to achieve them, were established for each system for the years 1980, 1985, 1995, and 2015. These targets have now been broken down to state levels to assist in program budgeting and land management planning.

This booklet explains the program and targets that have been assigned to Alaska in the activity areas of: (1) National Forest Administration; (2) State and Private Forestry, and (3) Research. Outputs from the various systems are shown in tables following the Alaska program narratives. These show proposed output targets under the RPA program compared to current program levels.

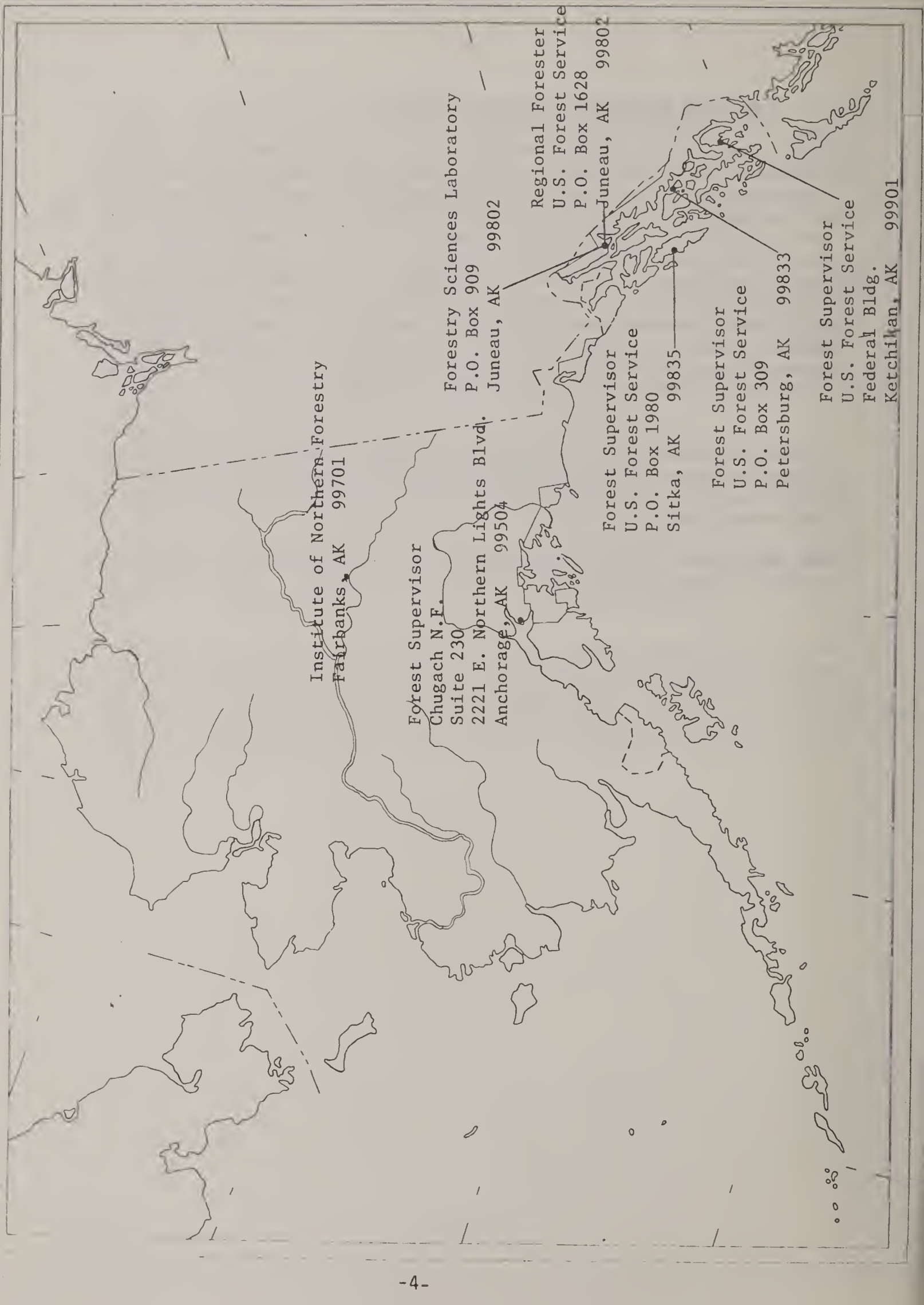
## II. Renewable Resources Program for Alaska

While Alaska has a wealth and diversity of natural resources that is second to none in the "Lower 48", there is considerable uncertainty regarding the State's ability to competitively supply goods and services to the nation. The National Forest System has the responsibility for the protection and management of the natural resources on the Tongass and Chugach National Forests. Our State and Private Forestry people are working with many State agencies, Native corporations, and private land-owners in the management and protection of their lands. Research facilities in Juneau and Fairbanks are working on a wide variety of research needs for Alaska's natural resources. Much research has been done and is continuing in areas, such as insect and disease, wildlife, fisheries, wildfire and the effects of logging.

RPA is not fully functional because present funding is not adequate to allow the Forest Service to meet the targets assigned in the Program. Currently the Program serves as a guide for planning and developing future outputs and expected costs, until Congress appropriates funds to meet those costs.

The map on the following page shows locations and addresses of Forest Service offices in Alaska.





A map of Alaska with several locations marked by dots and lines pointing to descriptive text. The locations are Fairbanks, Anchorage, Juneau, Sitka, Petersburg, and Ketchikan. Each location has a label for a Forest Supervisor or Regional Forester, the U.S. Forest Service, and a P.O. Box number. Dashed lines connect the labels to the corresponding locations on the map.

Institute of Northern Forestry  
Fairbanks, AK 99701

Forest Supervisor  
Chugach N.F.  
Suite 230  
2221 E. Northern Lights Blvd.  
Anchorage, AK 99504

Forestry Sciences Laboratory  
P.O. Box 909  
Juneau, AK 99802

Regional Forester  
U.S. Forest Service  
P.O. Box 1628  
Juneau, AK 99802

Forest Supervisor  
U.S. Forest Service  
P.O. Box 1980  
Sitka, AK 99835

Forest Supervisor  
U.S. Forest Service  
P.O. Box 309  
Petersburg, AK 99833

Forest Supervisor  
U.S. Forest Service  
Federal Bldg.  
Ketchikan, AK 99901

## A. National Forest System - Resource Systems

### 1. Recreation

"Increase supply of outdoor recreation opportunities and services through Forest Service programs that emphasize dispersed recreation."

The National Forest System and particularly the Alaska Region has one of the greatest potentials for providing additional relatively low-cost dispersed recreation opportunities such as hiking, hunting, fishing, beachcombing and cross-country skiing. Public comment clearly favored the idea that the Forest Service provide more dispersed opportunities and generally allow the private sector to assume a greater share of developed recreation facilities such as ski resorts and campgrounds. However, developed sites such as campgrounds and picnic areas will still be a major part of the Forest Service recreation program; they serve as important bases for many dispersed activities.

One of the primary objectives of land-use plans currently in progress, such as the Tongass Forest planning effort, is to allocate specific lands to recreation use because of their fish, wildlife, historic, scenic and other related recreation qualities and recognizing that some recreational opportunities exist on Alaska's National Forest lands that are in short supply elsewhere in the United States such as wildlands, high scenic quality, recreation shoreline and abundant fish and wildlife populations.

Although still a modest figure compared to other Regions, visitor use of the National Forests in the Alaskan Region is expected to double by year 2000. Impacts on many recreation sites will be sufficient to require additional programs and funding for campground maintenance, visitor information facility construction, installation of water and sewage facilities, trail maintenance and construction, and off-road vehicle monitoring.

### 2. Wilderness

"Provide for a moderate increase in wilderness for National Forest lands."

The public clearly indicated in the 1975 RPA assessment a desire for additional wilderness to be set aside for present and future generations. On a national scale, 12.3 million acres of the 187 million National Forest System are now in the National Wilderness Preservation System. This will increase to 15.2 million by 1980 and to roughly 30 million by 2020.

Although the Alaska Region presently has no classified wilderness there are approximately 2.6 million acres or roughly 13 percent of Alaska's National Forests in formal Wilderness Study Area status. Current land-use plans now and in progress, indicate 15-23 percent in classified wilderness by 2020. The Forest Service and University of Alaska are currently engaged in a cooperative study to assess the demand for wilderness in Alaska. Existing Wilderness Study Areas are:

<u>Name of Study Area</u>	<u>Acreage</u>
Tracy Fiord	902,000
Granite Fiord	509,000
King Salmon Capes	120,000
Petersburg Creek	24,000
Russell Fiord	227,000
Khaz Bay	33,000
Nellie Juan (Chugach N.F.)	704,000
	<u>2,600,000</u>

Considerable potential exists for the establishment of additional study areas on National Forest lands. Many areas have already been identified by the Forest Service and the public that appear to merit further study as prospective additions to the Wilderness Preservation System. These areas may be studied and recommendations formulated in conjunction with the land management planning efforts presently underway.

### 3. Fish and Wildlife

The National Forests in Region 10 offer some of the most diverse and unique wildlife and fishery management situations found in North America. Many of the species found on the forests are of national interest and significance. Examples include the Alaska brown bear, gray wolf, moose, Dall sheep, caribou, bald eagle, peregrine falcon, trumpeter swan, mountain goat, wolverine and salmon.

The goal is to outline more specific fish and wildlife policy, consistent with Forest Land Use Plans, and be an instrument for implementation of the policies outlined in those documents. This program reflects the greatest needs on the National Forests in Alaska, for knowledge of the fish and wildlife habitat requirements necessary for good land management decisions. It also presents an opportunity for a program of detailed research, monitoring and assessment of the impacts of land use activities on fish and wildlife habitat.



Management measures for fish habitat will be developed using the interdisciplinary team approach. Habitat protection and enhancement will recognize the need to ensure maintenance of proper stream temperatures, dissolved oxygen levels and adequate cover. Measures will be taken to minimize sedimentation and ensure free fish passage. Special emphasis will be placed on identifying tributaries important as rearing habitat and carrying out protection and enhancement measures to ensure that the productive capability of these tributaries is not impaired.

Wildlife habitat will be managed to attempt to sustain desirable levels of wildlife populations, to be determined jointly by the Forest Service and the Alaska Department of Fish and Game (ADF&G). These desirable levels will be based on elements such as value, demand, relative abundance, and competition with other species. Applicable wildlife populations include all species dependent on the National Forests for their existence. Special attention will be given to enhancement of wildlife habitat through modified timber harvest activities. These include small clearcuts to increase diversity of the habitat and pre-commercial thinning to permit more light in second-growth stands leading to an increase in food plants.

The objective of the Threatened, Endangered and Unique Species Program is to identify species, survey and inventory their populations, determine habitat needs, and enhance their habitat as required. Special protective management measures developed in conjunction with the Fish and Wildlife Service will be carried out. Public awareness of threatened and endangered species will be increased.

There are few places in the United States where production of salmon through enhancement measures (fishways, debris removal, etc.) yield as high benefit-cost ratios as in Alaska and have the potential for net present worths of the same magnitude.

#### 4. Timber

The Regional, National, and world consumption of timber products is increasing and can be expected to continue to increase. Although most Alaskan timber products are not expected to become competitive in domestic markets in the near future, this industry makes a substantial contribution to regional income and employment. Over one million acres of National Forest land in the Region are being withdrawn by Native Land Claims and State selections. There is legislation presently in Congress to declare various areas

as Wilderness. While Native and State lands are expected to contribute to the timber needs, wilderness lands will be dedicated to other needs.

An increasing demand for timber and decreasing land base will require that opportunities for better utilization, increased growth and yield, protection from insects and disease be assessed and improved management techniques be implemented where justified. A cooperative study between Region 10 and Pacific Northwest Forest and Range Experiment Station on the market potential for Alaskan timber products and the likely economic effects of timber sale policy options has just been completed.

Improved harvesting equipment and techniques are being evaluated and the most successful will be used to harvest areas that cannot now be economically harvested without unacceptable damage to other resources and to harvest endemic mortality.

Timber stand improvement programs, particularly density control, presently underway show potential of becoming a means of improving and maintaining optimum growth rates.

There is presently a reforestation backlog of about 7,360 acres, and about 1,000 acres of reforestation needs developing annually from current harvesting. Often areas where known regeneration problems exist are deferred from harvesting. The Region started a nursery and planting program in 1974. Planned expansion of this program will eliminate the backlog by 1984 and plant all areas where needed in the future.

Through these programs, considerable potential exists to increase managed growth and yield throughout the Region. As a correlary, major opportunities must be discovered and described through better inventory and evaluation of resources.

## 5. Land and Water

"Meet minimum air and water quality standards. Emphasize improvement of soil productivity and air and water quality while selectively improving, commensurate with benefits, water supply. Meet other land stewardship standards."

The Land and Water System is a collection of many activities necessary to maintain the productivity and quality of the land and water ecosystems. Land exchanges, land grants, minerals management, land line location, special use permit

administration, fire protection, non-point pollution control, watershed restoration, and soil and water quality programs all fall under this broad system. The Soil and Water Program emphasizes Forest Service responsibilities for ensuring that no activity is detrimental to watersheds or water quality, and that water production for municipal watersheds is maintained. It also reemphasizes the needs for stream rehabilitation, pollution monitoring on logging operations, and landslide and flood control to protect life and property. The Program aims at increasing water yields, improvement of soil productivity, erosion control and increased fire protection. It is a vital support system for all the other Resource Systems in the Program.

Cooperation with the State of Alaska in their selection of National Forest land for community expansion and development and recreation purposes will continue.

The Region is deeply involved with the Department of Interior and 17 Native Corporations in selection and conveyance of some 1,000,000 acres of National Forest as authorized by the Alaska Native Claims Settlement Act. Rights-of-way are identified and described to protect public access to public lands.

A substantial part of the total workload in Region 10 is involved in transportation engineering for the planning and construction of transportation facilities on the large undeveloped islands and mainland areas of both Southeastern and Southcentral Alaska. Comprehensive transportation planning, analysis and system management programming will become of increasing importance. Maintenance has been of a minor nature in past years but is becoming of growing importance with rapidly increasing public use of the transportation facilities. Many of our existing facilities have not received sufficient maintenance to prevent deterioration and provide for the safety of the user. Expanded use will require reconstruction of numerous routes.

Although fire activity in a coastal rainforest is generally quite low, evidence of extensive burns do exist. The ability of the moss and litter surface to dry quickly during brief rainless periods presents the potential for fire activity. As lightning is a rare occurrence, man-caused fires are the most significant, especially in areas of timber harvest. A ground fire will always produce heavy mortality due to the very shallow root system beneath the moss cover.



## 6. Minerals

The Alaska Region has a long history of mineral activities dating back to Russian days. There were many small gold operations scattered throughout the two National Forests that closed during World War II. Most have never reopened. Many low-grade iron and copper deposits are known, but transportation and high extraction costs have prevented development. Some uranium has been extracted with renewed current interest in this value. Large limestone deposits are found on Prince of Wales and surrounding islands. Large blocks of this material have been located and claimed by cement companies. Nickel deposits are known and have been intensively examined over the past few years. Recent molybdenum discoveries have precipitated renewed prospection and exploration throughout the Tongass. Oil and gas leases and lease applications cover many acres of the Yakutat Forelands and the Copper River Delta. The Bering River coalfields remain untouched with no current activity.

## 7. Human and Community Development

"Maximize emphasis of involvement in a variety of human and community development programs. All effort should be aimed at developing our greatest resource, people, and enhance and compliment the activities of other Forest Service resource systems."

Human Resource Programs have become the focal point of Forest Service activities with special emphasis on the development of our social needs and provide a greater appreciation of our renewable resources. Special emphasis will be placed on land use ethics, conservation and environmental education. Forest Service participation and assistance will continue in other human resource programs, i.e., Main Stream, Older Americans, and Comprehensive Employment and Training Act (CETA) of 1970.

In addition to our present and future Human and Community Development targets, the Forest Service will welcome programs which will enhance the development of human and natural resources.

Presently we have 206 persons participating in Human Resources Programs.

Worksheet for 1975 Renewable Resource Program (RPA)  
Region 10 Public Involvement

Key Outputs (1)	System (2)	Unit of Measure	FY 1977 Actual	Recommended Program Range	1980	1981- 1990	1991- 2000	2011- 2020
Rec. Use - Developed	R&W	Mil. RVD	.5	High	0.8	0.8	0.9	1.2
Rec. Use - Dispersed	R&W	Mil. RVD	.01	Low	0.8	0.7	0.8	0.9
Wilderness Maintained	R&W	% of R-10 Acres	0*	High	1.8	1.6	2.0	2.9
Wildlife Habitat Improvement	W&F	Thou. Acres	2,480	Low	1.6	1.5	1.9	2.4
Fish Habitat Improvement	W&F	Thou. Acres	2,600	High	13%	15%	18%	23%
Livestock Grazing - NFS (5)	R	Mil. AUM's	-0-	Low	7%	13%	15%	18%
Timber Sale Offering - NFS (5)	T	Bil. Cu. Ft.	.12	High	1.8	3.1	3.0	3.8
(Non-Industrial Private Lands)	T	Mil. Cu. Ft.	84	Low	1.6	2.8	2.9	3.1
Fire Prevention - NFS	L&W	No./Man-caused fires	-0-	High	1.0	0.5	1.0	1.0
Fire Suppression - S&PF	L&W	No. Per Mil.	14	High	1.0	0.5	1.0	1.0
Lands Acquisition & Exchange	L&W	Acres Protected Thou. Acres	-0-	Low	1.0	0.5	1.0	1.0
Transp. System - Roads (Approp. Funds)	All	Miles Constr./ Reconstr.	219	High	-0-	-0-	-0-	-0-
Transp. System - Roads (Timber Purch.)	All	Miles Constr./ Reconstr.	106	Low	0.15	0.15	0.16	0.17
Youth Conservation Corps	H&CD	Youth Positions Involved	122	High	0.13	0.14	0.15	0.14
Community Improvement	H&CD	Comm. Assist	12	Low	92	111.2	399.3	523.0
Inputs & Costs (3)				High	102.7	102.7	368.6	427.9
Operational Costs	All	Million \$	46.7	Low	26	26	20	22
Capital Investment	All	Million \$	1.7	High	29	24	19	18
Backlog	All	Million \$	2.3	Low	16	15	15	16
Total Costs (4)	All	Million \$	48.4	High	14	14	14	13
NFS Costs	All	Million \$	47.8	Low	4.2	5.2	10.4	-
Research Costs (6)	All	Million \$	(2.1)	High	3.8	4.8	9.6	-
S&PF Costs	All	Million \$	.7	Low	48	145	156	234
	All	Million \$		Low	44	134	138	191
	All	Million \$		High	219	222	184	158
	All	Million \$		Low	204	204	169	129
	All	Million \$		High	113	113	113	113
	All	Million \$		Low	107	107	107	107
	All	Million \$		High	19	19	18	19
	All	Million \$		Low	19	18	17	16
	All	Million \$		High	30.4	45.4	52.2	60.6
	All	Million \$		Low	28.1	41.9	48.1	49.5
	All	Million \$		High	65.0	54.8	73.0	90.3
	All	Million \$		Low	60.0	49.8	67.3	73.8
	All	Million \$		High	2.3	2.7	0.7	-0-
	All	Million \$		Low	2.2	2.5	0.6	-0-
	All	Million \$		High	97.7	102.9	125.9	150.9
	All	Million \$		Low	90.3	94.2	116.0	123.3
	All	Million \$		High	95.7	100.4	122.5	145.8
	All	Million \$		Low	88.5	91.9	113.0	119.3
	All	Million \$		Medium	(4.3)	(5.1)	(5.2)	(5.2)
	All	Million \$		High	2.0	2.5	3.3	5.0
	All	Million \$		Low	1.8	2.3	3.0	4.1

- (1) From RPA Summary Document, Appendix, pages 28 and 29.
- (2) R&W - Recreation & Wilderness System; W&F - Wildlife and Fish; R - Range System; T - Timber System; L&W - Land & Water System; H&CD - Human & Community Development.
- (3) Data may not add to totals due to rounding.
- (4) Total costs do not include the following Program Budget items: Payments to Bureau of Employment Compensation: Coop Work (Trust Fund); ASCS Expenses (Alloc.); O&C Grant Land (Alloc.); and Federal Highway Admin. Trust (Alloc.).
- (5) Conversion rate for NFS Timber Sale offering is 5 board feet per cubic foot.
- (6) Station costs are the Middle program range. Non-add.

\* No Wilderness formally established on National Forest lands in Alaska in 1977.





## B. State and Private Forestry - Resource Systems

### 1. Outdoor Recreation and Wilderness

The S&PF effort to improve the recreation opportunities in Alaska during the next five years will center on assistance to Native corporations and the State Forestry organization. Much of the emphasis will be to alert the corporations to the opportunities of setting aside portions of their land entitlement toward the purpose of hunter cabins in game abundant areas. Already there is awareness by the Native people to the dwindling game populations caused by human pressure. There is resentment by the Native people to outsiders harvesting game they consider to be theirs. Bridging the gap of misunderstanding and antagonism is difficult, but the financial returns gained by the local Native corporations by utilization of their own hunter facilities and Native village guides is recognized. Wisely directing this avenue of energy toward establishment of Native corporation financed and managed units will be part of the land planning activities for their corporations. S&PF personnel working with their various groups must be alert to possibilities and identify those which show promise.

Working with the State Forester's organization will present less of an opportunity to encourage private investments in the state. The vast wild area already accessible with numerous guides already in the system offers a minimum of chances for increased development. On rare occasions some opportunities will surface. Assistance in defining the chances are open to the entrepreneur.

### 2. Fish and Wildlife Habitat

Endangered and threatened species in Alaska are limited in number. The peregrine falcon and Aleutian Canada goose are the primary ones in jeopardy because of the very habitat usage by the birds themselves. In plants there are more species involved, but the extent of their growth ranges is only loosely known. S&PF activities extend across land ownership. Bringing information to Alaska residents on the status of threatened plants and creatures likewise involves describing the species themselves as well as their habitat requirements. Determining the conditions of habitat in which these species grow and thrive becomes necessary as there are inadequate data. It is sufficient to know that man's pressure for development and overharvest will develop problems, but identification of these limits and bringing the information to the population will forestall and possibly avoid the decline of the threatened species, whatever they may be.

Our program addresses these avenues and we plan to finance a researcher to activate the system. Working with the State Forester's office becomes one of the better avenues for presenting information and advice. The dissemination of these data to the individual and corporate groups provides the best opportunity to enhance our threatened species habitat and improve the success of the species.

### 3. Timber

The imminent acquisition of an estimated 15 million acres of forested lands by Native corporations provides the S&PF group with the largest potential for assistance. Development of Native owned and operated forest industries and the resultant demand for resource management training, advice, and counsel, are provided in the program. Such developments as inventory programs by Native corporations, timber sale programs, information on small and mid-size sawmills and possibilities for chip harvest have been increasing. Working through the State Forester's organization, the Cooperative Forestry program is geared to service these needs. The personnel of the Alaska Region Forest Service are frequently called upon to supplement the existing State and S&PF group in presenting the information at training sessions, seminars and the like.

Providing assistance in forest land management and industrial techniques bridges the gap between inadequate knowledge and the determination to develop viable forest-based industry. Beginning from a modest start several years ago, the program for Native assistance has slowly increased and eclipsed the assistance program for other private landowners. The goal is to bring a working knowledge of forest land management to all private land holders for all size ownerships. The potential for these sources to assist the economy of the nation in utilization of the natural resources is a major opportunity.

Improvement in the processing techniques to more fully use the wildlands products from stump to finished products through the forest products utilization work continues. Sawmills and finishing mills for these products can have their processes adjusted to recapture more of the material presented. Suggestions and methods for avoiding degrade and standardizing the outcoming product constitute one of the more successful portions of the program as immediate returns are evident. Our program calls for increased support of the industry in needs of this assistance. Included as part of the support to upgrade the operation of these businesses is also the training

of managerial people in business management. The RPA program for 1980 addresses these needs and recognizes the opportunities for achieving them.

#### 4. Land and Water

The major emphasis in this resource system is protection of the resources through fire, insect and disease management, and wise land management planning. In Alaska, the State is assuming responsibility for fire protection of all State and private lands. The support developed by Federal funds allocated under the Clarke-McNary Act has been a great asset in organizing their fire protection forces. Organization and training assistance have been provided. Though the State forces are not yet fully staffed and capable of providing complete protection measures, the switchover to State protection forces is underway.

Insect and forest disease surveillance and monitoring of conditions in Alaska is the responsibility of the Division of State and Private Forestry (S&PF). Through sampling of known insect outbreaks and maintaining close watch on incipient populations, conditions affecting forests are identified, and where practical and urgent, measures are initiated to reduce the impact of such outbreaks.

Land management planning and counsel with landowners seeks to instruct and guide in reasonable usage of the land. With the acquisition of over 44 million acres of former public lands, the Alaska Native corporations are the largest potential client groups. Many of these have expressed interest in joint land planning and area land-use planning. The Native corporations are limited in their reservoir of technically qualified people available to proceed with these studies and deliberations. However, the knowledge of their lands and the melding of expertise will surmount the difficulties encountered. S&PF programs to support the activities are a major thrust of the entire effort of the Region.

The S&PF programs also include cooperative River Basin studies involving many federal and state agencies and local government.

#### 5. Human and Community Development

The S&PF program in Alaska has worked with the State Forestry organization in support of several job opportunity programs. During the past few years these have proved to be valuable to local residents providing forest cultural work, construction of a forest nursery and building a local fire



station. In future years, we anticipate additional activities in this program concentrating on similar projects which provide rural jobs and forest related improvements.

In the rural community fire program there is an urgent need to assist rural groups in acquiring fire equipment and training. Much of Alaska is remote and knowledge about the local communities needs are difficult to ascertain. Frequently their ability to assemble community funds to qualify in Federal programs has been the obstacle in obtaining supplies. Both the State Forester's and S&PF's organizations are working to assist these communities and groups receive the training and equipment needed to reduce the heavy impact of fires.

Urban forestry has not been a major thrust in Alaska. Until recently the principal activities were restricted to information about tree care and plantings. As more development centers around the major populations of Anchorage and Fairbanks, the need for advice and counsel becomes more apparent. City parks and green areas assume importance to meet the needs of the citizens.

## 6. Range

Emphasis by the Division of S&PF during the immediate period is to be concentrated on assistance to existing landowners with small spreads of animals. The hostile climates and predation have made range herding a risky business. Native grass has a very short period when it is sufficient for forage, making dependence upon other browse critical.

Future activities in range appear more rewarding using native animals such as muskox and reindeer. Existing herds are concentrated in western Alaska and difficulties exist when caribou lead away reindeer. Introduction of legislation voiding ownership restriction of reindeer to only Native people would provide opportunities for energetic pursual by other owners. Reindeer plus muskox potential opportunities as food sources are reasonably well known though much can be gained through additional intensive research. Economic examination of the possibilities for production quotas of these animals in herds would open the way to determining the chances for future red meat industries in the state. Certainly the range appears physically capable for providing for extensive herds. It remains to be determined if a viable industry can exist before successful ventures appear.

## C. Pacific Northwest Forest & Range Experiment Station

### 1. Resource Evaluation (Alaska)

Research must take a lead role in inventorying renewable resources of the forest and rangelands of Alaska. The magnitude of the inventorying job will require development and application of a vegetation classification system that is identifiable with satellite imagery or high level photography. New measures of productivity for forest and rangelands must be described and adopted to evaluate the condition and potential of the state's vast land area. Research will also have major responsibility for coordinating Forest Service resource evaluations on National Forests with those of other federal and State agencies having responsibility for renewable resource management.

### 2. Recreation (Alaska)

Recreational opportunities in Alaska range from solitary wilderness experience to commercial cruises. In general the recreational needs and experiences of Alaskan residents are greatly different than those of nonresident visitors.

Research will assess the recreational needs of both and match opportunities with needs for the resource manager's guidance. Research will provide a better measure of the satisfactions that boaters, fishermen, climbers, and hunters seek in Alaska to guide in protecting or developing specific recreational attractions.

Many federal and State agencies as well as private groups of citizens are concerned with developing the tremendous recreational opportunities of Alaska by providing general guidance or needs and opportunities will help foster coordinated recreation programs.

### 3. Fish and Wildlife

#### a. Oregon, Washington and Alaska

Research on maintaining and improving the habitat for anadromous fish such as salmon and steelhead is being accelerated through coordinated programs in the Pacific coastal states and Idaho. The impacts of land management activities, such as logging, road construction,

and grazing, are being identified and evaluated. In particular, the importance of streamside vegetation on water conditions and food organisms will be determined. Guidelines are being developed on how forest management activities may be modified to improve fish habitat.

Terrestrial wildlife habitat research in Oregon and Washington will continue to focus on development of habitat management systems for big game such as deer and elk. New emphasis is also going into research on non-game species and into development of guidelines for timber harvest in conjunction with protection of non-game species.

b. Alaska

Research efforts will be increased to provide forest land managers with ways of maintaining or enhancing wildlife and fish habitats. Criteria will be sharpened to evaluate the Alaskan habitat needs of anadromous fish, big game, migratory waterfowl, and other birds and small mammals. For example, studies will undertake to determine summer and winter water temperatures that are critical to those species of salmon and trout that inhabit Alaskan streams. Other research will determine the effects of opening timber stands on stream temperatures and on the general productivity of the stream for insects and fish populations.

Through research and the resulting guides to habitat requirements, the land manager can prescribe the manner of other resource use, including the methods of timber harvesting. Here research in timber harvesting systems will be invaluable in providing a greater choice of systems and a means of matching environmental criteria with capabilities of a given system.

4. Timber

Research will be relied on for increasing inputs as some of the forests of southeast Alaska are converted from overmature timber stands to young growth. Regeneration problems are uncommon but are peculiar to new soils. The potential for disease and insect damage to young timber stands is largely unknown. Management of thrifty young timber by controlling stand density is just beginning through cooperative efforts of National Forest systems



and research. Needed are economic evaluations of these and other intensive timber management opportunities, as well as the economic and social trade-off values of timber management versus other competing or conflicting land-use management opportunities. Windthrow in southeast Alaska needs further study because of its significance to fish and wildlife habitat, as well as to timber production.

Regeneration, succession, and management problems of interior Alaska are strongly influenced by frequent fires and by other influences to the sensitive ecosystems, in particular permafrost, poor drainage, and low annual precipitation. More research will be directed to the manner in which plant successional patterns may be modified and the growth of desirable species encourage on a wide range of soil and climatic conditions. Research will be expanded to develop timber harvesting methods that insure adequate regeneration of favored species.

Economic studies and evaluations of the various land-use opportunities are needed to keep pace with an increasing demand for food crops, timber, water, recreation, and wildlife.

## 5. Land and Water (Alaska)

Advanced logging systems are needed to protect southeast Alaska's soil and water resources. Further research developments of long-reach skyline systems will help reduce necessary roads and their impact on soil movement and stream sedimentation. Adapting new skyline systems to southeast Alaska will minimize soil disturbance and subsequent erosion. It will likewise reduce the chances of stream damage by lifting logs over water courses. Research on advanced logging systems will give special attention to their adaptability to Alaska conditions.

TABLE II

Forest Service Research, Pacific Northwest Forest and Range Experiment Station, Juneau  
and Fairbanks, Alaska

RPA Element	FY 1977	FY 1980	FY 1985	FY 1995	FY 2015
Recreation & Wilderness	0	180.0	190.0	195.0	200.0
Wildlife & Fish Habitat	641.0	900.0	1,045.0	1,050.0	1,060.0
Range	0	0	0	0	0
Timber	1,281.2	2,340.0	2,850.0	2,875.0	2,895.0
Land & Water	139.7	900.0	1,045.0	1,050.0	1,060.0
Totals	2,061.9	4,320.0	5,130.0	5,170.0	5,215.0

### III. The Look Ahead to 1980

The Alaska Region of the Forest Service is implementing the RPA and National Forest Management Act. We have completed a draft of an Area Guide for southeast Alaska. Area Guides provide the link between the national assessment and program to a more local and specific area of land. The Southeast Alaska Area Guide provides the basis for the development of a land management plan for the Tongass National Forest. This land management plan will allocate land and resources to specific uses including wilderness. It is scheduled for release with a draft environmental statement in December 1978.

The Chugach National Forest has a completed land management plan. It plans to develop an Area Guide for southcentral Alaska in 1979. The completion of that Guide will provide a closer tie with the RPA.

The Forest Service has completed preliminary Area Guides for two of the proposed National Forests in interior Alaska and will be completing one more in the near future.

The Forest Service is now working on the second Assessment of the Nation's natural resources, to be completed by 1980. Program targets established by the 1975 Assessment will be modified as necessary by 1980 Assessment information.

Full public involvement in the 1980 Assessment is being sought by the Forest Service. This is to insure that, (1) the public understands what RPA is and what its scope and impacts are; and (2) that the needs and desires of the American public concerning their forests and rangelands are adequately reflected in the 1980 Assessment and resultant programs.

Opportunities exist for all interested people and organizations to become involved in the 1980 Assessment. The Alaska Region's public involvement plan for the 1980 Assessment and subsequent program is designed to reach as many of the State's residents as possible. We hope that you will have the time and the interest to study the materials that have been provided. We want to be able to incorporate your needs and desires into the Forest Service Resource Management Program for 1980.







